

Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently amended) An isolated DNA molecule consisting of a DNA sequence encoding polypeptide MTBN4, wherein the polypeptide is not encoded by the genome of cells of the Bacille Calmette Guerin (BCG) strain of *Mycobacterium bovis*.
2. (Currently amended) An isolated DNA molecule consisting of a DNA sequence encoding a segment of polypeptide MTBN4 shorter than full-length polypeptide MTBN4, wherein said segment retains the antigenic properties of MTBN4 and wherein the MTBN4 polypeptide is not encoded by the genome of cells of the Bacille Calmette Guerin (BCG) strain of *Mycobacterium bovis*.
3. (Previously presented) A vector comprising:
 - (a) the DNA molecule of claim 1; and
 - (b) a regulatory sequence operationally linked to said DNA sequence, said regulatory sequence allowing for expression of the polypeptide encoded by said DNA sequence in a cell.
4. (Previously presented) A vector comprising:
 - (a) the DNA molecule of claim 2; and
 - (b) a regulatory sequence operationally linked to said DNA sequence, said regulatory sequence allowing for expression of the polypeptide encoded by said DNA sequence in a cell.
5. (Original) A cell transformed with the vector of claim 3.
6. (Original) A cell transformed with the vector of claim 4.

7. (Currently amended) A composition comprising [[the]] a vector of claim 3 and a pharmaceutically acceptable diluent or filler, wherein the vector comprises a DNA molecule consisting of a DNA sequence encoding polypeptide MTBN4 and wherein the polypeptide is not encoded by the genome of cells of the Bacille Calmette Guerin (BCG) strain of *Mycobacterium bovis*.

8. (Currently amended) A composition comprising [[the]] a vector of claim 4 and a pharmaceutically acceptable diluent or filler, wherein the vector comprises an isolated DNA molecule consisting of a DNA sequence encoding a segment of polypeptide MTBN4 shorter than full-length polypeptide MTBN4 and wherein the polypeptide is not encoded by the genome of cells of the Bacille Calmette Guerin (BCG) strain of *Mycobacterium bovis*.

9. (Currently amended) A composition comprising:
at least two DNA sequences, each encoding a polypeptide of the *Mycobacterium tuberculosis* complex that is not a polypeptide encoded by the genome of cells of the Bacille Calmette Guerin (BCG) strain of *Mycobacterium bovis*, said DNA sequences being operationally linked to a regulatory sequence which allows for expression of each said polypeptide in a cell of a vertebrate, wherein at least one of said at least two DNA sequences is a DNA molecule of claim 1.

10. (Currently amended) A composition comprising:
at least two DNA sequences, each encoding a functional fragment of a polypeptide of the *Mycobacterium tuberculosis* complex that is not a polypeptide encoded by the genome of cells of the Bacille Calmette Guerin (BCG) strain of *Mycobacterium bovis*, said DNA sequences being operationally linked to a regulatory sequence which allows for expression of each said polypeptide in a cell of a vertebrate, wherein at least one of said at least DNA sequences is a DNA molecule of claim 2.

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35. (Previously presented) The DNA molecule of claim 1, wherein the DNA sequence is *mtbn4*.

36. - 54. (Cancelled)